



Dart Aerospace Ltd.
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Canada

Tel (613) 632-5200

Reprint

C250-OH
Job Sheet 170891



Part No: C250-OH

Job Qty: 1 ea

Part Name: C-Series Remote Hook 25,000 lbs Lift Capacity



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 1/23/18

Job Tracking No:

Due Date: 1/30/18

Created By: Linda Lacelle

Type: Stock

Description:

Note: O&OPM-C250 REV.4 IPP REV:A 18.01.16 NEW ISSUE DD VERF:DP

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Start up Operation	1 Ea		1/29/18	0.00	0.00	Start Up Small Fab-4		SB
120	QC	1 pcs		1/29/18	0.00	0.00	QC5		NA PD
130	Customer Acceptance	1 pcs		1/29/18	0.00	0.00			N/A PD
140	Outsource	1 pcs		1/29/18	0.00	0.00			N/A PD
150	Packaging	1 pcs		1/29/18	0.00	0.00	Packaging2		N/A PD
160	QC	1 pcs		1/29/18	0.00	0.00	QC6		N/A PD
170	Small Fab	1 pcs		1/30/18	0.00	1.00	Small Fab-9		AP
180	QC	1 pcs		1/30/18	0.00	0.00	QC5		13-02-07
190	Packaging	1 pcs		1/30/18	0.00	0.00	Packaging3-2		SMB
200	QC21-FG	1 Ea		1/30/18	0.00	0.00	QC21		21

Part Op
Descriptions: 170 - RE-ASSEMBLE. TEST ASSEMBLY.

FEB 07 2018
TSK

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
C250-AR	C-Series Remote Hook 25,000 lbs Lift Capacity	1 pcs (1 ea)	100-Start up Operation	
188-FPSS-1/4-20-3/8	Set Screw	2 Ea (2 ea)	170-Small Fab	
188-FPSS-1032-1/4	Set Screw	2 Ea (2 ea)	170-Small Fab	
188-FSCS-1032-1-1/4	Screw	16 Ea (16 ea)	170-Small Fab	
2595K2	Heat Shrink	1 (1 ea)	170-Small Fab	
32448	16-14 AWG Knife Connector	2 (2 ea)	170-Small Fab	
AN4-23A	Bolt	2 Ea (2 ea)	170-Small Fab	
C10-11	Manual Release Knob	1 (1 ea)	170-Small Fab	
C10-21-4	Lock Washer	16 Ea (16 ea)	170-Small Fab	
C10-23-2	Keeper Spring	2 Ea (2 ea)	170-Small Fab	
C10-41	Stain Relief Connector	1 Ea (1 ea)	170-Small Fab	
C10-9-2	Latch Bearing Torrington	1 Ea (1 ea)	170-Small Fab	
C20-570	Lock Return Spring	1 (1 ea)	170-Small Fab	
C20-720	Lever Arm Bearing	1 (1 ea)	170-Small Fab	
C20-735	Lever Arm Return Spring	1 (1 ea)	170-Small Fab	
C20-740	Link Spring	1 Ea (1 ea)	170-Small Fab	
C250-100	Side Plate Cover	1 (1 ea)	170-Small Fab	
C250-200	Side Plate Housing	1 (1 ea)	170-Small Fab	
C45-3-2-1	Snap Ring	2 (2 ea)	170-Small Fab	

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS				
Part No. _____		Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	
NCR No. _____		Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	
		Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	
		Large Fab ☐	Composite ☐	Supplier ☐		

Date : _____ Step #: _____ QTY Effective : _____ SI042) Approval _____

Description Work Order Deviation

Job No: 170891
 Operation 02/06/18

Start up Operation
 C250
 Original Serial #: S039550
 Revision: _____
 Change No: _____

C-Series Remote Hook 25,000 lbs Lift Capacity
 S039550
 DART AEROSPACE

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 TEL: 1 613 632-5200
 Email: sales@dartaero.com
 www.dartaerospace.com

Root Cause		Pressure/Forced	
Environment ☐	No Re-verification ☐	Bending ☐	
Design ☐	Operator ☐	Centre Not Concentric ☐	
Doc/Data ☐	Offset/Setup ☐	Cracks ☐	
Equip/Tooling ☐	Supplier ☐	Crimp/Kink/Ripple/Wave ☐	
Handling/Pre ☐	Training ☐	Cuffs ☐	
Material ☐	Use for Testing ☐	Crushing ☐	
Internal Transport ☐	Poor Information ☐	Heat Treat ☐	
Tribal Knowledge ☐	Rushing ☐	Wave/Twist in Tube ☐	
LOA ☐	Product Improvement ☐	Marks/Chatter ☐	
Substation ☐	Process Improvement ☐		
Past Expiry Date ☐	Manufacturing Process ☐		
Misidentified ☐	Past Due ☐		
		OTHER : _____	

☐ Part Lost/Missing
☐ Part Moved
☐ Drawing
☐ Finish
☐ Misread
☐ Turning Sequence

C45-3-4-1	Retaining Ring	6 Ea (6 ea)	170-Small Fab
C45-8-4	Solenoid Cover Gasket	1 (1 ea)	170-Small Fab
C45-8-5	Solenoid Cover	1 Ea (1 ea)	170-Small Fab
EL-PLUG-M	3-Prong Male Spade Plug	1 Ea (1 ea)	170-Small Fab
EL314-SJTOW	3 Wire	1 ft (1 ea)	170-Small Fab
MS21044N8	Nut, Self-Lock .500-20,UNJF-3B	4 Ea (4 ea)	170-Small Fab
MS21083N4	Nut	2 Ea (2 ea)	170-Small Fab
MS27039-4-08	Screw	1 Ea (1 ea)	170-Small Fab
NAS1149F0432P	Washer	2 Ea (2 ea)	170-Small Fab
NAS1149F0463P	Washer	3 Ea (3 ea)	170-Small Fab
NAS1149F0863P	Washer	8 Ea (8 ea)	170-Small Fab
PC250-120	Location Pin	3 Ea (3 ea)	170-Small Fab
PC250-130	Bolt	3 Ea (3 ea)	170-Small Fab
PC250-220	Lower Lock Bumper	1 (1 ea)	170-Small Fab
PC250-230	Upper Lock Bumper	2 (2 ea)	170-Small Fab
PC250-300A	Load Beam Assembly	1 (1 ea)	170-Small Fab
PC250-320	Bushing	2 (2 ea)	170-Small Fab
PC250-330	Bumper Load Beam	2 (2 ea)	170-Small Fab
PC250-400	Keeper Assembly	1 (1 ea)	170-Small Fab
PC250-410	Bushing	4 (4 ea)	170-Small Fab
PC250-450	Bolt	1 Ea (1 ea)	170-Small Fab
PC250-480	Keeper Spring Spacer	1 (1 ea)	170-Small Fab
PC250-500A	Lock Assembly	1 (1 ea)	170-Small Fab
PC250-510	Roller Pin	1 (1 ea)	170-Small Fab
PC250-520	Roller	1 (1 ea)	170-Small Fab
PC250-540	Bushing	2 (2 ea)	170-Small Fab
PC250-550	Retaining Ring	2 (2 ea)	170-Small Fab
PC250-560	Anchor Pin	2 Ea (2 ea)	170-Small Fab
PC250-600A	Bell Crank Assembly	1 (1 ea)	170-Small Fab
PC250-610	Pin	1 (1 ea)	170-Small Fab
PC250-650	Bell Crank Bushing	2 (2 ea)	170-Small Fab
PC250-700	Lever Arm	1 (1 ea)	170-Small Fab
PC250-710	Lever Arm Pin	1 (1 ea)	170-Small Fab
PC250-715	Lever Bearing Shaft	1 (1 ea)	170-Small Fab
PC250-750	Link	1 (1 ea)	170-Small Fab
PC250-760	Link Pin	2 (2 ea)	170-Small Fab
PC250-775	Lever Arm Bushing	2 (2 ea)	170-Small Fab
PC250-800	Clock Spring	2 (2 ea)	170-Small Fab
PC250-810	Spring Cover	2 (2 ea)	170-Small Fab
PC250-900A	Solenoid Assembly	1 Ea (1 ea)	170-Small Fab

N/A

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Start up Operation	C250	1	0	0
170-Small Fab	188-FPSS-1/4-20-3/8	2	100	0
	188-FPSS-1032-1/4	2	25	0
	188-FSCS-1032-1-1/4	16	50	0
	2595K2	1	0	0
	32448	2	0	0
	AN4-23A	2	632	0
	C10-11	1	0	0
	C10-21-4	16	100	0
	C10-23-2	2	0	0
	C10-41	1	0	0
	C10-9-2	1	11	0
	C20-570	1	0	0
	C20-720	1	0	0
	C20-735	1	0	0
	C20-740	1	0	0
	C250-100	1	0	0
	C250-200	1	0	0
	C45-3-2-1	2	0	0
	C45-3-4-1	6	100	0
	C45-8-4	1	0	0
	C45-8-5	1	0	0

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

EL-PLUG-M	1	38	0
EL314-SJTOW	1	250	0
MS21044N8	4	58	0
MS21083N4	2	0	0
MS27039-4-08	1	100	0
NAS1149F0432P	2	1,624	0
NAS1149F0463P	3	184	0
NAS1149F0863P	8	200	0
PC250-120	3	5	0
PC250-130	3	5	0
PC250-220	1	0	0
PC250-230	2	0	0
PC250-300A	1	0	0
PC250-320	2	0	0
PC250-330	2	0	0
PC250-400	1	0	0
PC250-410	4	0	0
PC250-450	1	5	0
PC250-480	1	0	0
PC250-500A	1	0	0
PC250-510	1	0	0
PC250-520	1	0	0
PC250-540	2	0	0
PC250-550	2	0	0
PC250-560	2	10	0
PC250-600A	1	0	0
PC250-610	1	0	0
PC250-650	2	0	0
PC250-700	1	0	0
PC250-710	1	0	0
PC250-715	1	0	0
PC250-750	1	0	0
PC250-760	2	0	0
PC250-775	2	0	0
PC250-800	2	0	0
PC250-810	2	0	0
PC250-900A	1	0	0

Part Specifications

Specifications could not be found.

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					



Remote Cargo Hook Test Form

C250

Pre-Test

Work Order

170891

Customer

RAISZ Helicopter Transport S

Serial Number

AC11003

Date

1-17-18

# of Releases	Load (Lbs.)	Release Method	Remarks	Result	Pass/fail
1	62,500	Static Hold	Hold for two Minutes and reduce load to zero	N/A	- <i>PASS</i>
10	12,500	Electircal, 25 volts	No "hang ups" permitted	N/A	- <i>PASS</i>
2	25,000	Electircal, 22 volts	Current shall not exceed 13.6A	<i>9.5</i> Amp.	- <i>PASS</i>
2	20,000	Electircal, 22 volts	Current shall not exceed 13.6A	<i>9.5</i> Amp.	- <i>PASS</i>
2	15,000	Electircal, 22 volts	Current shall not exceed 13.6A	<i>9.5</i> Amp.	- <i>PASS</i>
2	10,000	Electircal, 22 volts	Current shall not exceed 13.6A	<i>9.5</i> Amp.	- <i>PASS</i>
2	500	Electircal, 22 volts	Current shall not exceed 13.6A	<i>9.5</i> Amp.	- <i>PASS</i>
1	25,000	Electircal, 20 volts	Current shall not exceed 12.4A	<i>8.5</i> Amp.	- <i>PASS</i>
1	25,000	Electircal, 28 volts	Current shall not exceed 17.3A	<i>4.5</i> Amp.	- <i>PASS</i>
1	25,000	Manual		N/A	- <i>PASS</i>
1	25,000	Impact Test	Impact shackle 10 times, shall not release	N/A	- <i>PASS</i>
1	N/A	Solenoid Ohms	Shall not exceed 1.7-2.0 Ohms	<i>1.8</i> Ohms	- <i>PASS</i>
1	N/A	Electircal Continuity	Across both wires	N/A	- <i>PASS</i>

Test Conducted By

Freddy M.

Technician

Submit

Signature:

Eric Downing Quality Assurance

Director of Quality Assurance



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CANADA

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Email: Support.or@dartaero.com
Web Site: www.dartaero.com

CERTIFICATE OF CONFORMANCE

CUSTOMER: Helicopter Transport Services

PURCHASE ORDER: HTR-4350

Part Number	Description	Qty	Batch
C250	C250 Hook Tested -Passed As per O&OPM-C250 Rev. 4 3/2/2017 Test report attached	1	SN11003

PACKING SLIP: 01910

ALL MATERIALS, PARTS OR COMPONENTS HAVE BEEN INSPECTED AND COMPLY WITH THE
PURCHASE ORDER REQUIREMENTS.

DATE: January 17, 2018

BY:
APPROVED QA SIGNATORY

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Mission
Ready